NWX-DEPT OF COMMERCE US

Moderator: Deborah Rivera-Nieves
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1:00 pm CT

Coordinator: Welcome and thank you for standing by. At this time all participants are on listen-only mode. During the question-and-answer session if you would like to ask a question, please press star then 1.

Please be advised that today's conference is being recorded. If you have any objections, you may disconnect at this time.

Now I would like to turn the meeting over to Miss Deborah Rivera. You may begin.

Deborah Rivera-Nieves: Thank you very much, Brittany. Good afternoon everyone. As Brittany stated, I am Deb Rivera. I am your host for today and I would like to welcome all of you who joined our Census Academy webinar. If you hear anything in the background, please go ahead and ignore that. It should stop in a few minutes anyway.

So we have an amazing session for you today. We are going to explore the advanced features of the Census Business Builder, and this is a session that is especially for all of the power users out there.

So a few housekeeping items before we start. As the operator has stated, we are recording this webinar from beginning to end and we will be posting the recording to our Census Academy site as a free learning resource. We will hold off for questions until the end of the presentation, and when that time comes we ask that you please keep your questions to one question and one follow up, at which point if you have any other questions remaining you're welcome to queue up again.

I also want to mention that the presentation today is an advanced user session. It is, essentially, meant for anyone who is acquainted with the Census Business Builder tool. Now if anyone is in need of a refresher or if there are any new users of the tool joining us today, we absolutely welcome you to stay but we also encourage you to visit our Census Academy site where you can find an introductory course of the basic features of this tool.

I would now like to introduce our presenter, the wonderful Andy Hait. Mr. Hait is an economist and services as the data product and data user liaison in the Government and Trade Management Division at the US Census Bureau. Thank you, Andy.

Andy Hait: Thank you so much, Deb. So again, as Deb mentioned, today's webinar is going to be to review a few the advanced features of Census Business Builder. The features that we're going to look at today are how to upload your own data using the My Variables feature in the Census Business Builder, how to add a reference layer, how to use and change the map classing method that is used in Census Business Builder, and finally how to build a complex rate region in Regional Analyst edition.

The first three features we're going to be talking about are applicable to both the small business and the regional analyst edition of CBB. The last feature is specific to the regional analyst edition. So with that I'm going to quickly go ahead and minimize our presentation and go out to the Census Bureau's website and show you how to do these particular features.

So the first feature we're going to explore today is how to upload your own data using Census Business Builder. One of the comments we had received from users over the years was that it would be nice to be able to upload statistics that they have about their particular business or for their organization and be able to match that data up with our data.

So last year in the June release, we added this feature to Census Business Builder. Again, the feature is available in both the small business edition but I'm going to go ahead and demonstrate it in the small business edition. So in my example here today we're going to pretend that we are restaurant owner in the city of Philadelphia and we have some data that we want to be able to compare to with statistics for the general market to see how the customers of my restaurant compare to all of the customers in a particular area.

So I'm going to go ahead first and choose food services and choose restaurants and then I'm going to go ahead and I'm going to look for the data specifically for the city of Philadelphia. So I'm going to type in P-H-I-L-A. You need to type in at least four characters and pretty quickly you get a list of all of the Philas that are - that we have data for and Philadelphia city is the one we're interested in.

So once I have now chosen my type of business and my geography now we go to map and the create report features button turn on. So I'm going to go ahead and go the map and that will now zoom me in to the city of Philadelphia,

specifically highlighted, and immediately we can see there's about 1.5, almost 1.6 million people that live in the city of Philadelphia.

Census Business Builder provides data not only at the city level but also at the state, county, zip code and even census tract level. So I'm going to zoom in a little bit and look at zip code level data for the city of Philadelphia so that we can do this evaluation, do this comparison between the customers of our restaurant and all of the general people that live in that area.

So I'm going to pan them out a little bit to center us more on the city of Philadelphia. I'm - once the map finishes rendering I'm then going to zoom in a little bit on the city, let it finish doing its thing here. We will then zoom in on the city of Philadelphia. So now we've zoomed in some more and now I'm going to go ahead and I'm actually going to upload the data for my restaurant for the city of Philadelphia.

So the way you do the map upload is you go the Map Variables menu and the very last tab here on the end is My Variables. So we're going to choose My Variables and the application then gives us a sample upload file so we can see what a file should look like, what do these files that I'm going to upload should look like, or it also provides a learn more link.

Clicking on Learn More brings us to a flyer that actual gives us detailed information about how to use this upload feature. Since I'm showing you all how to do this, we're not going to go to the flyer. So the first thing we're going to do is we're go over and we're going to browse to find the actual data file we are interested in.

So I have saved a file to our desktop. It's this file called Restaurant Customer Data. So I'm going to go ahead and say I want that one and I'm going to open

that file. And right away the application then gives me a list of all of the fields, all of the data fields, the columns that are in that Excel file that I created.

So in my Excel file I have information on the numbers of customers of my restaurant. I had information on the customer sales, the total sales of those customers. I have some information on how much of those customer sales were discounted, meaning customers used a coupon, let's say, for my business and just to kind of compare that, I have a calculated field or a sales per customer, so this tool will allow you to upload that. And I even have a calculated field on coupon share that is basically the percentage of these discount sales to the total customer sales.

So once I say that, yes, this file does look right I can then accept the upload and the application has now loaded those data into Census Business Builder. Going back to the My Variables menu I can now see those variables that I just uploaded.

Now a couple of quick caveats about this. First of all, Census Business Builder allows you to currently upload up to ten variables. So if I had an Excel file that had more than ten variables in that data file, it would only let me upload the first ten. So in this case that's not a problem. Second, the geographies that are included in the Excel file that I uploaded have to match the geographies, the vintage and the boundaries of those geographies that are in Census Business Builder.

If the data file that I had tried to upload included some geographic areas that are not recognized by Census Business Builder, I would have gotten an error message that would have said, "Hey, one or more of your data fields is not being recognized," or, "One or more of your geographies is not being

recognized." If the entire file was bad, if all the geographies in the Excel file were bad then I would have gotten an error message indicating that the entire file in not able to be uploaded.

But in this case it did work so I'm going to go ahead and I'm going to click on that customer's variable and now I can see the customer's data overlaid into this map exactly the way I had uploaded it. So I can now click around and I can say in zip code 19147 there were 550 customers of my particular - of my restaurant. I can then go in and change the customers to what were the sales of those customers. So in that particular zip code I can see that it was about $25,000 in total sales of those customers.

Once you have uploaded data into the Census Business Builder all of the other map features still work. So I could go into the filter now and I can say find all the cases where the number of my customers is less than a certain number but the total population in that area is larger than a certain number. So I could look at demographic and business data and my data simultaneously in the filter.

When you upload your own data in Census Business Builder, it is accessible only to you. No one else can actually see this data. And when I close Census Business Builder, these data that I just uploaded disappear. They are not persistent. So customers who are concerned about making sure that their private data is kept private, that is fine because CBB, again, is only making a connection between your computer and our server, not your computer and the rest of the system. No one else can see the data you uploaded.

Again, when I close Census Business Builder that connection is severed and all of the data that you had available in the tool is then gone. So each time you want to upload your own data you have to do it separately. So that essentially

is the data upload feature. Let's go ahead and actually change our variable back to total population instead of our map variable that we uploaded, and now I want to show the second feature, the second advanced feature of Census Business Builder and that is the reference layers tool.

Census Business Builder does give you the ability to add reference layers, and when you add in a reference layer, you can either add one of the layers that we've already loaded in part of our gallery, so things like legislative boundaries, urban area boundaries, Native American boundaries, and school district boundaries, or I can upload my own shape file or my own web service.

The little "I" icon here to the right of this give you access to a flyer that describes how to actually do that. Since uploading a shape file is pretty straightforward, anybody who knows what a shape file is would know what uploading that is, since that's pretty straightforward I'm not going to demonstrate that but I do want to show you all how to add a web service since that's not quite as common a practice.

So I'm going to cancel out of this first and in our particular demo that I'm going to do today we're going to go over and change our geography over to San Diego, California. Now the map service, the web service that I actually have for this application that I have for our demo today is a map service for the city of San Diego that they prepared.

So I'm going to go ahead and zoom in a little bit on the city of San Diego and now I'm going to back over to our reference layers feature. I'm going to click on Add a New Layer and this time I want to add a web service. When I click on Add Web Service, it's going to allow me to go in and actually put the URL of the web service that I have. So I've go ahead - gone ahead now and I've

copied a particular web service URL that has - that I have access to and I can now paste that web service URL into the tool.

Now you'll notice right away first of all it has to be a secure HTTP web service, so your URL has to start with HTTPS. In this particular case I am actually uploading an RTIS web service but you could upload any other web service as long as it's being delivered as a rest service.

Once I go ahead and say I'm interested in now applying with that map service, it goes ahead and puts a check on it and now I can go in and I can set up the map transparency for that particular web service. So if I want to make that layer more transparent or less transparent, I can adjust the transparency or I can delete that reference player.

Now you'll notice that the web service is not showing up yet on our display so I'm going to zoom in a little bit more and I'm going to make that web service a little bit less transparent and hopefully it will actually show up here. Let me see what's going on here. Okay it looks like my web service is being cranky today here.

Let me go ahead and adjust this. I'm going to delete this web service and let's try it again. Okay. It looks like I made it angry. So the web service must be just trying to tie into the application. But again, once that was actually loaded -- let me turn this off here -- let's try again. Let me reapply that web service. It looks like it's going to be cranky here. Let's close this here and let's try it again.

Okay. Let's try that again. Add a new layer. I'll go ahead and apply this one. Okay. Well it looks like I'm - we're going to be having a problem here today. Okay. So, sorry about that. Normally you would actually be able to see the

boundaries of that actual web service displayed on the screen and you'd then be able to see that.

Now a key point about this web service, about these reference layers is they are only present in the tool as a reference layer. They are not actually available in the tool and are not there to interact with the data. We have had some questions from users saying, "Could you create a web service or a shape file that actually would interact with the data that would allow us, for example, to build a region where I could upload the shape file?"

Currently that's not available but we're actually working on adding that particular feature to the application. So I'm going to go ahead and close this since it looks like my demo here is just going to be cranky. So the third advanced feature I want to show you all is the map classing scheme.

So as many of you know, the different methods that are available for displaying data on a map can have a big impact on how the map actually displays. So I'm going to go ahead and zoom to my hometown or the city I went to school in -- Syracuse, New York -- and we're going to show how choosing the map scheme, the classing scheme can make a difference on how the data are displayed.

So in this case we're starting off looking at total population for the city of Syracuse. You can see the population is about 144,000 people that live in the city of Syracuse. If I went ahead and chose our variable - or excuse me, changed the variable to rent or occupied housing units, we're going to see a map that still sort of mirrors that same color palette that we had seen before but if we look over at the ranges for each of the variables for each in the legend, we can clearly see that this blue category has this really huge range

from 2800 all the way to 34,000, whereas the other ranges are much smaller and much closer variables.

So in the - so in this classing scheme, using the quantiles classing scheme, all of the variables, the values on this map were then divided up into five equal intervals and actually then came up with those - with what those ranges would be. So the fact that there are far fewer rental units outside of the city of Syracuse is not apparent when you look at this map. But maybe if we chose a different classing scheme, they might be.

So by clicking on the gear icon, I can change both the color palette, so let's go to a more traditional green-blue color palette, so now I'm using a more standard dark-to-light fade, but I can also go in and change the classing method. And currently in the tool, the tool offers two options: equal interval and quantile. Quantile is the default, but when I change this to equal interval, you'll see how dramatically different the map now looks.

So now we are seeing a map where you can clearly see how different the number of renter-occupied housing units are in the city of Syracuse versus the neighboring areas outside. Three of the four extra values aren't even possible, aren't even shown on the map, so basically you're seeing this dramatically different display of data where you have one central city that has a very large number of renter-occupied housing units and then surrounding areas with very few.

So when you're looking at data for a very evenly distributed population where the data are evenly distributed across the different geographies, viewing the data broken out by quantile versus equal interval does not make much of a difference, but when you have a variable like renter-occupied housing units, you can clearly see that if your purpose is to show different the City of

Syracuse is versus the neighboring areas, using that equal interval method gives you a much, much different display.

So that's the basic features I wanted to demonstrate in small business edition of Census Business Builder. Let's now go out and actually look at the regional analyst edition to look at this last advanced feature, which is the ability to build a complex region. So in this case I'm going to again go to Census Business Builder but this time I'm going to choose the regional analyst edition.

Now in the regional analyst edition the tool displays data for all the types of businesses in a region, so that initial menu where we chose restaurants is now gone. We're going to pretend we are the president of a chamber of commerce here in Maryland. So I'm going to go to Calvert County, Maryland as the counties I'm interested in and the application is going to zoom me in to Calvert County and I can now see what the total population is in Calvert County, Maryland. So I can see it's about 90,000.

We're going to pretend that as the president of the chamber of commerce of southern Maryland, the southern Maryland chamber of commerce, I want to build a profile of the service area that my chamber covers. So my service area includes all of Calvert County, all of Charles County and all of St. Mary's County but it also includes a couple of areas in these neighboring communities, the areas that are up against the edge of the three counties that I'm interested in.

So to build my region, I click on Edit Region and one by one I can now go over here and add in each of the entire counties that I am interested in on my map. So I've gone ahead and added in Calvert County and Charles County and now St. Mary's County. I can now name this region, so let's just call this

Southern Maryland, and when I'm done editing it I can now see that that three-county area is now outlined.

Well in reality the boundaries of my chamber of commerce actually include some additional geographies, some additional businesses that are in these neighboring areas. So if I now want to build a region that includes not only these three counties but also some additional zip codes, I can go ahead and change my level of geography to zip code so now I'm looking at a zip code-level map, and now I can go ahead and one at a time I can add in additional geographies and they don't just have to be counties.

I can now add zip codes or cities or census tracts. So the application does allow me to go in and actually add geographies of different types. So I'm going to go ahead and we're going to add in this one zip code over here. So I'm going to, again, go back to Edit Region and this time I'm now going to click on the zip code that I want to add to my region.

When the application presents that zip code if the boundaries of the zip code that you've selected do not overlap at all with the geography that you've already built, it will automatically add it. But if the geography that you're trying to add does overlap with the area that you've already built, you get this error message or you get this identifying message.

And this feature is really important, the zoom to overlap feature. This allows me to evaluate just how bad the overlap is. Perhaps for my purposes it doesn't really make that much of a difference. So when I'm now zoomed in on the zip code I tried to add, I can see this little tiny piece of the zip code over here that is marked on the Xs is the piece that actually overlaps with the county that I've already selected.

If I browsed around here, nothing else on this particular geography is a problem. It's just that one little tiny corner up over here where the geography of the zip code actually overlaps, where if there were people or businesses in this overlap area, we would essentially be counting them twice.

Now in my particular situation I may decide, you know, as the chamber of commerce president I'm okay with that little bit of an overlap because I know that nobody lives there or I know that there's no businesses that are physically located there, so I'm going to say, yes, let's go ahead and let's add it to the region.

So now the application has actually added that particular zip code and we can now see our region now includes three counties and one zip code. However, if I was interested in adding another area to this, let's say I want to add this next zip code over here, 20714, I can once again click on that zip code. Once again I get that error message, that message that's saying this area may overlap, do you want to check it? Do you want to make sure this is okay? And when I now zoom into that overlap, I can actually discover that, wow, a big piece of that zip code that I cared about overlaps.

Here's a lot of the zip code is up over here that I selected but this entire area down here in the North Beach, Maryland area, all of this geography actually is being double counted. So I may say, no, no, no, I don't want to add that geography. So the application is intelligent enough to prevent users or to at least alert users to the fact that when they're adding these geographies that there may be an overlap and that they may need to take into account that overlap when they are actually building their geography.

This has been a very, very popular feature in the Census Business Builder regional analyst edition because it is allowing chambers of commerce and

other regional planning authorities whose boundaries don't follow entire counties or entire cities but instead include parts of cities, parts of counties and if they want to add those geographies, they can now do that using this tool. And if I went in and actually said I'm done editing, it's now going to add that geography to my area and now I can clearly see that the entire thing is now all in there.

So essentially those are the four key power users features that I wanted to talk about. What I'd like to do now is bring up my PowerPoint file and we can go ahead and take some questions.

Operator, are there any questions?

Coordinator: And if you would like to ask a question, you may do so by pressing star then 1 and record your name clearly when prompted. If you need to withdraw your question, you may do so by pressing star then 2. One moment as we wait for the first question.

And as a reminder if you would like to ask a question, please press star then 1. One moment as we wait for any questions.

We do have a question on the line. One moment.

Andy Hait: Thank you.

Coordinator: All right. And our first question comes from Alicia. Your line is now open.

Alicia: With the regional builder, does that also go away when you close it? So if you build all your regions, do you have to rebuild them when you come back through it?

Andy Hait: No. That's actually a really great question. So in both the small business and the regional analyst editions of Census Business Builder, you can actually bookmark the URL to both the map and the report that Census Business Builder creates. So let's say you built this really nice 13-county, two-city, six-zip code area and you want to save that work and come back to it later, you can actually copy the URL at the top of the application and then when you return to that URL at a later time, it'll bring you right back to the map exactly where you were when you last left it.

It actually saves all of the components that you built of that region into the body of the URL. And again, that would allow you to not only you get back to it but if you then wanted to share that URL with a friend or a colleague, you could actually do that.

Just to give you a little idea of how we are currently using that bookmarking feature, in the last year or so we've been working very closely with FEMA on providing information about areas that were impacted by natural disasters, so fires and floods and hurricanes, et cetera. In the last year we have created over 1000 of those deep links to the counties and the cities that were impacted by disasters all last year and you can actually go in and click on each of those links and actually go in and look at what the population was in that area that was impacted by that hurricane or what was the number of businesses that were in that particular area.

So, yes, we are using that bookmarking feature pretty extensively, again, because it makes it so easy to be able to go back in and re-look at that information after you've spent the time to build that region. So, yes, great, great question.

Alicia: Thank you.

Coordinator: As a reminder if you would like to ask a question, please press star then 1 and record your name clearly when prompted. We do have a question on the line. The name was not recorded but if you star 1 to ask a question, caller, your line is now open. Please check your mute button.

                     Okay. That caller is not responding.

Andy Hait: Okay.

Coordinator: And as a reminder if you would like to ask a question, please press star 1. One moment as we wait for any additional questions.

                     At this time there are no questions on the phone.

Andy Hait: Okay. Well thank you all so much for taking time out of your busy day to learn about some of these advanced features of Census Business Builder. Again, the recording - the webinar is going to be recorded and will be posted at a later date so if you want to go back and review these materials they will be available. And again, the Census Business Builder website also does have a lot of these kinds of training materials there as well. So thank you so much for your time.

Coordinator: Thank you for your participation in today's conference. All parties may disconnect at this time.

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